II. CLAIMS

1. (Currently Amended) A semiconductor workpiece processing system comprising:

at least one processing tool for processing semiconductor workpieces;

a container for holding at least one semiconductor workpiece therein for transport to and from the processing tool;

a first transport section connected to the processing tool for transporting the container to and from the processing tool; and

a second transport section connected to the first transport section for transporting the container to a variable location of the first transport section where the container is transferred between the first and second transports sections for transporting the container to and from the processing tool;

wherein the first transport section is a vehicle based section having a transport vehicle capable of holding the container and moving along a first track of the first transport section, and the second transport section is not a vehicle based section and has a second track with at least one support element of the second track adapted to interface with the container for movably supporting the container from the second track and allowing the container

to move relative to the first track, and wherein the second transport section has a motor connected to the second track for moving the container on the second track and stopping the container on the second track in alignment with the transport vehicle positioned at ~~a~~ the variable location on the first track so that the container can be picked from the second track by the transport vehicle without repositioning of both the container and the transport vehicle once the container is stopped on the second track.

2. (Original) The system according to Claim 1, wherein the motor is connected to the second track for driving the container along the second track, at least a portion of the motor being mounted to the container.

3. (Original) The system according to Claim 2, wherein the container has a one-piece frame assembly, the at least a portion of the motor being integral to the frame assembly of the container.

4. (Original) The system according to claim 2, wherein at least a portion of the motor is molded in a portion of the frame assembly.

5. (Original) The system according to claim 2, wherein at least a portion of the motor is removably mounted to the frame assembly.

6. (Original) The system according to Claim 2, wherein at least another portion of the motor is fixedly connected to the track.

7. (Original) The system according to Claim 2, wherein the motor is a linear motor.

8. (Original) The system according to Claim 2, wherein the motor is a brushless motor.

9. (Original) The system according to claim 2, wherein the motor is a solid state motor without moving parts.

10. (Original) The system according to Claim 2, wherein the at least a portion of the motor mounted to the container includes a permanent magnet mounted to the container.

11. (Original) The system according to Claim 2, wherein the at least a portion of the motor mounted to the container includes at least two permanent magnets, the permanent magnets being arranged on the container so that an axis connecting poles of one of the two magnets is oriented at an angle relative to another axis connecting poles of another of the two magnets.

12. (Original) The system according to Claim 2, wherein the motor is adapted for bi-directionally driving the container along the second track.

13. (Original) The system according to Claim 2, wherein the motor is adapted for bi-directionally driving the container so

that the container is capable of moving bi-directionally along two different axes.

14. (Original) The system according to Claim 13, wherein the two different axes are crossing axes.

15. (Original) The system according to Claim 1, wherein the second track has a longitudinal portion with at least one shunt portion extending laterally from the longitudinal portion.

16. (Original) The system according to Claim 15, wherein the at least one shunt portion provides for track buffering.

17. (Original) The system according to Claim 1, wherein at least a portion of the first transport section is disposed between the at least one processing tool and the second transport section.

18. (Original) The system according to Claim 1, wherein at least a portion of the second track of the second transport section extends substantially alongside a portion of the first track of the first transport section.

19. (Original) The system according to Claim 1, wherein at least a portion of the second track of the second transport section spans between at least two portions of the first track of the first transport section.

20. (Original) The system according to claim 1, wherein the first track and second track are disposed proximate to each

other to allow the container to be moved therebetween in one move.

21. (Currently Amended) A semiconductor workpiece container transport system comprising:

at least one semiconductor workpiece container adapted for holding at least one semiconductor workpiece therein, the semiconductor workpiece container having a one-piece frame assembly;

a track for movably supporting the at least one semiconductor workpiece container so that the at least one semiconductor workpiece container is capable of moving along the track; and

a motor connected to the track for driving the at least one container along the track, wherein at least part of the motor is mounted to the frame assembly of the at least one container so that the frame assembly and the part of the motor mounted thereto are removed from the track as a unit causing disconnection of the part of the motor, mounted to the frame assembly, from another part of the motor connected to the track, the motor being configured to drive the container along two different axes without reorienting the container when transitioning between the two axes.

22. (Original) The system according to Claim 21, wherein the frame assembly has an interface section for mating with a load port section of a processing tool and allowing the at least one

semiconductor workpiece to be transferred between the at least one container and load port section.

23. (Original) The system according to Claim 21, wherein the motor is a linear motor having a primary coil assembly connected to the track, and wherein the at least one part of the motor mounted to the frame assembly is a reaction portion of the linear motor reacting with the primary coil assembly for driving the at least one container along the track.

24. (Original) The system according to Claim 23, wherein the reaction portion of the linear motor comprises a reaction plate mounted to the frame assembly, the reaction plate including a magnetic plate capable of reacting with the primary coil assembly.

25. (Original) The system according to Claim 23, wherein the reaction portion of the linear motor comprises permanent magnets mounted to the frame assembly.

26. (Original) The system according to Claim 23, wherein the reaction plate is arranged for bi-directionally driving the at least one container along two crossing axes.

27. (Original) The system according to Claim 21, further comprising another track and a vehicle adapted for traveling on the other track and for holding the at least one container thereon, the vehicle having a transport mechanism for transporting the container between the track and the other track.

28. (Currently Amended) A semiconductor workpiece transport container comprising:

a frame defining a chamber for holding therein at least one semiconductor workpiece, the frame being sized and shaped for interfacing with an interfacing portion of a semiconductor workpiece processing tool to allow the at least one semiconductor workpiece to be transported between the chamber and processing tool, wherein the frame defines at least one surface for seating against a track of a transport system for transporting the container between the processing tool and another location, the at least one surface having two axes oriented in the same plane; and

a motor portion mounted to the frame so that the frame and motor portion mounted thereto are movable as a unit to and from the track, the motor portion being adapted to cooperate with another motor portion of the transport system for driving the container along the track such that the frame is driven along the track with any one of the two axes oriented in a direction of travel along the track.

29. (Original) The container according to claim 28, wherein the motor portion is adapted to cooperate with the other motor portion for driving the container in opposite directions along the track.

30. (Original) The container according to claim 28, wherein the motor portion is adapted to cooperate with the other motor portion for driving the container in crossing directions relative to the track.

31. (Original) The container according to claim 28, wherein the frame and the motor portion mounted thereto form a one-piece assembly.

32. (Original) The container according to claim 28, wherein the motor portion is a reaction portion of a linear motor, and the other motor portion is a coil assembly of the linear motor connected to the track.

33. (Original) The container according to claim 28, wherein the frame includes engagement surfaces for enabling a transport vehicle to capture and carry the container from the track.

34. (Previously Presented) A semiconductor workpiece processing system comprising:

at least one processing tool for processing semiconductor workpieces;

a first transport section connected to the processing tool for transporting containers holding semiconductor workpieces to and from the processing tool; and

a second transport section connected to the first transport section for transporting the containers between separate locations of the first transport section;

wherein the first transport section is a vehicle based section having a transport vehicle capable of holding at least one of the containers and moving along a first track of the first transport section, and the second transport section is not a vehicle based section and has a second

track with support elements thereon adapted to interface the containers for movably supporting the containers from the second track and allowing the containers to move bi-directionally relative to the track, and wherein the second transport section has one motor connected to the second track, the one motor being capable of driving the containers in opposite directions substantially simultaneously on at least one common portion of the second track.

35. (Original) The processing system according to Claim 34, wherein the at least one portion of the second track is an intermediate portion of the second track at a distance from an end portion of the second track.

36. (Original) The processing system according to Claim 34, wherein the at least one portion is any portion of the second track.

37. (Original) The processing system according to Claim 34, wherein the motor is a linear motor.

38. (Original) The processing system according to Claim 34, wherein the motor includes at least one motor portion mounted on at least one of the containers.

39. (Previously Presented) A semiconductor workpiece processing system comprising:

at least one processing tool for processing semiconductor workpieces;

a container for holding at least one semiconductor workpiece therein for transport to and from the processing tool;

a first transport section connected to the processing tool for transporting the container to and from the processing tool, the first transport section having a first track and a transport vehicle movably supported from the first track and capable of picking the container; and

a second transport section connected to the first transport section for transporting the container to and from the processing tool, the second transport section having a conveyor track with a track surface adapted to interface with the container, and a motor connected to the conveyor track for moving the container on the conveyor track;

wherein the motor is adapted for stopping the container at any location along a portion of the conveyor track so that any location along the portion of the conveyor track can be a predetermined position relative to the transport vehicle for providing a pickplace for the transport vehicle to pick the container from the conveyor track without repositioning of both the container and the transport vehicle once the container is stopped on the second track.

40. (Original) The system according to Claim 39, wherein the portion of the conveyor track extends along the first track.

41. (Original) The system according to Claim 39, wherein the conveyor track has track segments joined to each other at intermediate connections of the conveyor track to form the conveyor track, the track segments being adapted for being joined to each other during installation of the conveyor track.

42. (Original) The system according to Claim 39, further comprising a position sensor connected to the second transport section, the position sensor being adapted to sense the position of the container at any location along the conveyor track.

43. (Previously Presented) The system according to Claim 42, wherein at least a portion of the motor provides the position sensor.

44. (Previously Presented) A material handling system for transporting a container capable of holding at least one workpiece and transporting the at least one workpiece in a controlled environment between a workpiece processing tool and another location, the system comprising:

a conveyor transport section including a drive track for driving the container, the drive track having track elements interfacing with the container for driving the container, wherein the drive track is modular with drive track modules, each drive track module defining a length of the drive track for a predetermined drive track length and being adapted to be removed and joined together, as a unit, end to end to form extended lengths of the drive track

during drive track installation, wherein each drive track module has at least one of the track elements integral thereto.

45. (Previously Presented) The system according to claim 21, wherein the at least part of the motor that is mounted to the frame assembly of the at least one container defines a multiaxial drive motor.

46. (Previously Presented) The system according to claim 28, wherein the motor portion mounted to the frame defines a multiaxial drive motor.

47. (Previously Presented) The system according to claim 1, wherein the second transport section is configured for transporting the container between separate locations of the first transport section at transport speeds greater than a transport speed of the first transport section.